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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/995,257	11/27/2001	Kim A. Anderson	21652.CIP1	2011

9355 7590 11/04/2005

JACQUELINE E. HARTT, PH.D
ALLEN, DYER, DOPPELT, MILBRATH & GILCHRIST, P.A.
P.O. BOX 3791
ORLANDO, FL 32802-3791

EXAMINER	
BROWN JR, NATHAN H	

ART UNIT	PAPER NUMBER
2121	

DATE MAILED: 11/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/995,257	ANDERSON ET AL.	
	Examiner	Art Unit	
	Nathan H. Brown, Jr.	2121	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *(3)* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *August 8, 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-24* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-24* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

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Examiner's Detailed Office Action

1. This Office is responsive to application 09/995257, filed August, 8, 2005.

2. Claims 1-24 have been examined.

Double Patenting

3. A rejection based on double patenting of the "same invention" type finds its support in the language of 35 U.S.C. 101 which states that "whoever invents or discovers any new and useful process ... may obtain a patent therefor ..." (Emphasis added). Thus, the term "same invention," in this context, means an invention drawn to identical subject matter. See *Miller v. Eagle Mfg. Co.*, 151 U.S. 186 (1894); *In re Ockert*, 245 F.2d 467, 114 USPQ 330 (CCPA 1957); and *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970).

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed.

Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington,* 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

4. Claims 2-3, 6-10, 12-13, 15-16, 18-22, and 24 are rejected under 35 U.S.C. 101 as claiming exactly the same invention as that of claims of prior U.S. Patent No. 6324531 B1. The application to patent claim matches are shown in the following table.

Table. Application to Patent Claim Matches

App. 09/995257	USPN 6324531 B1
2	2
3	3
6	5
7	6
8	8
9	9
10	10
12	12
13	13
15	16
16	17

18	19
19	20
20	21
21	22
22	23
24	25

The application is an obvious variant of the patent. The patent sets forth all limits in the above application claims. This is a double patenting rejection.

5. Claims 1, 4, 5, 7, 11, 14, 17, and 23 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1, 11, of U.S. Patent No. 6324531 B1. Although the conflicting claims are not identical, they are not patentably distinct from each other because of the reasons cited below.

Regarding claim 1. The patent sets forth all limits in the claim except "using an analytical method selected from a group consisting of inductively coupled plasma-optical emission spectrometry and inductively coupled plasma-mass spectrometry..." The use of inductively coupled plasma-optical emission spectrometry and inductively coupled plasma-mass spectrometry is disclosed in *EVS*, "Aquatic Effects Technology Evaluation Program, Project #3.1.2. Technical Evaluation: Water Quality and Biological Effects", May 1997 (*see* §3.1, pp. 176-21), as being equivalent to the limitations in the patent. (*Examiner notes that the choice of spectrometric technique here is simply a choice of art equivalent analytical data from two techniques of spectrometry which provide the same analytical result (albeit, with differences in sensitivities and number of elements scan able simultaneously. Examiner further notes that the*

selection of spectrometric data source is not relevant to the technique of neural network processing applied to obtain the detection decision of the method claimed because numerical data (resulting from some form of measurement or analysis) is inherent in the use of neural networks (see Hassoum, "Fundamentals of Artificial Neural Networks", 1995, p 35, second para.).) It would have been obvious to a person having ordinary skill in the art at the time of applicant's invention to modify the invention of the claim 1 of the '531' patent as taught by EVS since the two methods are art equivalents.

Regarding claim 4. The patent sets forth all limits in the claim except "the selected analytical method on each liquefied commodity portion." Patent claim 7 recites "The method recited in claim 1, wherein the sample analyzing step comprises the steps of: liquefying at least a portion of each sample of the fresh commodity; and performing inductively coupled plasma atomic emission spectrometry on each liquefied commodity portion." The liquefaction of at least a portion of each sample for performing inductively coupled plasma atomic emission spectrometry is disclosed in *EVS* (*see* p. 17, §3.1, first para.). It would have been obvious at the time the invention was made to persons having ordinary skill in the art that the sample analyzing step comprises the steps of liquefying at least a portion of each sample.

Regarding claim 5. The patent sets forth all limits in the claim except "wherein the analytical method performing step comprises determining concentrations of a plurality of trace elements." Determining concentrations of a plurality of trace elements is disclosed in *EVS* (*see* p. 19, Table 4-1). It would have been obvious at the time the invention was made to persons having ordinary

skill in the art ICP-AES, ICP-OES, and ICP-MS are used for determining concentrations of a plurality of trace elements.

Regarding claim 11. The patent sets forth all limits in the claim except for "using an analytical method selected from a group consisting of inductively coupled plasma-optical emission spectrometry and inductively coupled plasma-mass spectrometry..." The use of inductively coupled plasma-optical emission spectrometry and inductively coupled plasma-mass spectrometry is disclosed in *EVS* (*see* above) as being equivalent to the limitations in the patent. (*Examiner notes that the choice of spectrometric technique here is simply a choice of art equivalent analytical data from two techniques of spectrometry which provide the same analytical result.*) It would have been obvious at the time the invention was made to persons having ordinary skill in the art to modify the invention of the '531' patent with the art equivalent analytical method as taught by *EVS*.

Regarding claim 14. The patent sets forth all limits in the claim except for *"using an analytical method selected from a group consisting of inductively coupled plasma-optical emission spectrometry and inductively coupled plasma-mass spectrometry..."* ..." The use of inductively coupled plasma-optical emission spectrometry and inductively coupled plasma-mass spectrometry is disclosed in *EVS* (*see* above) as being an art equivalent to the limitations in the patent. (*Examiner notes that the use of one of the spectrometric techniques is just an alternative way of collecting a chemical composition profile.*) It would have been obvious at the time the

invention was made to persons having ordinary skill in the art to modify the invention of the '531' patent with the art equivalent analytical method as taught by *EVS*.

Regarding claim 17. The patent sets forth all limits in the claim except "wherein the trace element analysis further at least one element selected from the group consisting of cadmium, cobalt, molybdenum, nickel, lead, vanadium, gallium, and selenium." However, examiner notes that cadmium is at least one element selected from the group in the patent's claim 19 which "consists of calcium, cadmium, potassium, magnesium nickel, phosphorus, sulfur, and strontium."

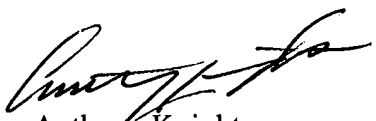
Regarding claim 23. The patent sets forth all limits in the claim except "*using an analytical method selected from a group consisting of inductively coupled plasma-optical emission spectrometry and inductively coupled plasma-mass spectrometry...* " The use of inductively coupled plasma-optical emission spectrometry and inductively coupled plasma-mass spectrometry is disclosed in (*see* above) as being an art equivalent to the limitations in the patent. Therefore, it would have been obvious at the time the invention was made to persons having ordinary skill in the art to utilize an art equivalent analytical method.

Remarks

Regret indication of allowability. New double patenting rejections are given. If Applicant were to file a terminal disclaimer, favorable consideration would be given to the application.

Correspondence Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nathan H. Brown, Jr. whose telephone number is 571-272- 8632. The examiner can normally be reached on M-F 0830-1700. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anthony Knight can be reached on 571-272-3687. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Anthony Knight
Supervisory Patent Examiner
Tech Center 2100

Nathan H. Brown, Jr.
November 1, 2005